Capacity Building Workshop, Module 2B

Introduction

- Project-Oriented IRWM Topics
 - Project Development and Evaluation Tools
 - Sustainability Concepts and Climate Change Tools

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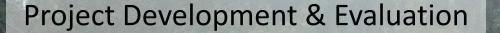
Introduction

- IRWM Project Types
 - Water supply reliability, water conservation, and water use efficiency
 - Stormwater capture, storage, clean-up, treatment, and management
 - Removal of invasive non-native species, the creation and enhancement of wetlands, and the acquisition, protection, and restoration of open space and watershed lands
 - Non-point source pollution reduction, management, and monitoring
 - Groundwater recharge and management projects
 - Contaminant and salt removal through reclamation, desalting, and other treatment technologies and conveyance of reclaimed water for distribution to users
 - Water banking, exchange, reclamation, and improvement of water quality
 - Planning and implementation of multipurpose flood management programs
 - Watershed protection and management
 - Drinking water treatment and distribution
 - Ecosystem and fisheries restoration and protection









Cost/Benefit Economic Analysis

- PROJECT PHYSICAL BENEFITS
 - Expected measurable accomplishments of a project
 - » Must have multiple benefits (PRC §75026.(a))
 - » Based over the period of analysis
 - » Consistent with the provided need (e.g., meeting IRWM Plan goals and objectives)
 - » Focus on primary and secondary benefits



Project Development & Evaluation

- Examples of physical benefits include:
 - Amount of water supply produced
 - Types and amounts of water quality improvement
 - Amount of water treated.
 - Types and amounts of environmental benefits (e.g., types and numbers of species benefited; provide information on any analysis, studies, etc.)
 - Amount of energy produced or saved
 - Amount of reduced GHG emissions

NOTE: These are **quantifiable** physical benefits; should also consider **qualitative** descriptions of physical and environmental benefits



Project Development & Evaluation Example Physical Benefits Table Table – Annual Project Physical Benefits Project Name: Type of Benefit Claimed: Units of the Benefit Claimed: **Additional Information About this Benefit** (a) (c) (d) **Physical Benefits Change Resulting from Project Without Project** With Project Year (b) - (c)2014 2015 2016 Etc. Last Year of **Project Life Comments:**

Project Development & Evaluation

TECHNICAL ANALYSIS OF PHYSICAL BENEFITS CLAIMED

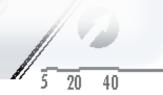
- Describe primary and secondary benefits and address:
 - <u>Technical Basis:</u> Include justifying studies
 - Provide background for benefits: For example, recent water shortages, historical loss of habitat or ecosystem function, or chronic or acute water quality problems.

Have a technical studies repository website:

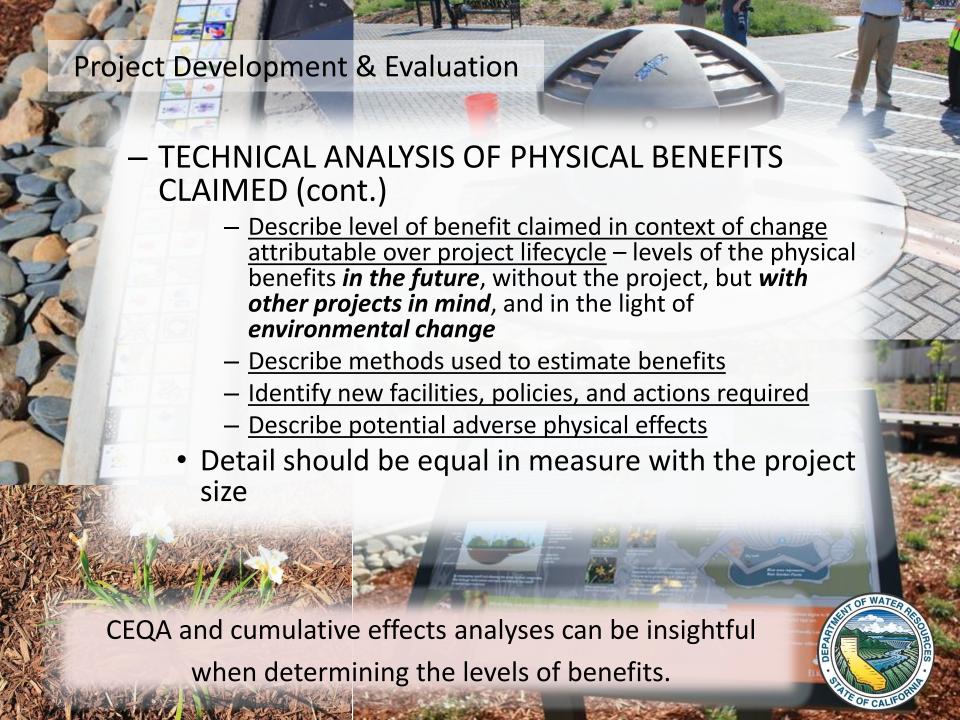
- Technical Reports
- FeasibilityStudies
- NeedsAssessments
- Expert opinion
- Local Knowledge
- Journals
- Monitoring Data
- Toolkits

CENTER









Project Development & Evaluation

COST EFFECTIVE ANALYSIS

- Evaluates whether the physical benefits are provided at the least possible cost.
- Information needed and questions to address
 - Types of benefits
 - Alternative methods considered
 - Reasons for not considering alternatives
 - List of alternatives and estimated costs
 - If not least cost alternative, describe why project is preferred
 - Describe unique benefits of alternatives
- Apply reasonableness test

